

# EXHIBIT N

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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**RECOR MEDICAL, INC.**  
**OTSUKA MEDICAL DEVICES CO., LTD.**  
Petitioners,

v.

**MEDTRONIC IRELAND MANUFACTURING UNLIMITED CO.,**  
Patent Owner.

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Case IPR2022-00431  
U.S. Patent No. 8,845,629

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**PATENT OWNER'S PRELIMINARY RESPONSE**

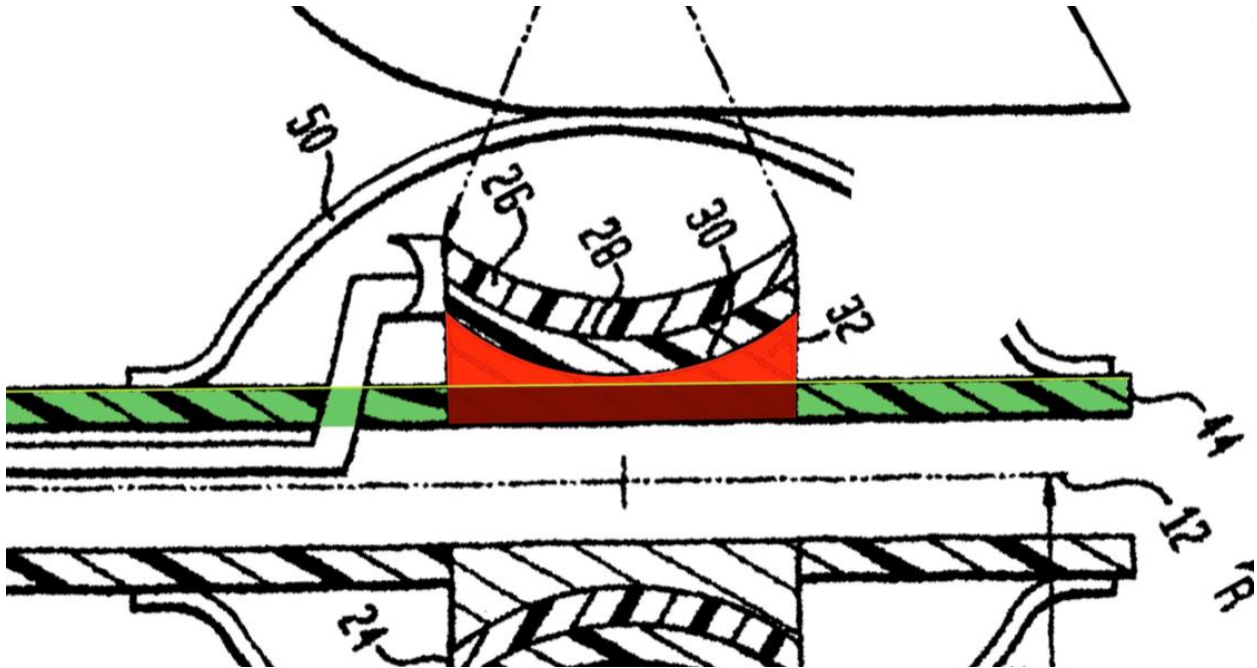
nerve and this danger to the patient—particularly when Petitioners’ Ground places the catheter in the renal artery, which Levin explains is even “more dangerous.”

Pet., 37, 42; Levin, ¶94.

Petitioners’ alleged motivations to combine rely on nothing more than impermissible hindsight. Furthermore, particularly in view of evidence Petitioners ignored, a POSITA looking at Levin and Acker would not have combined their teachings together or expected the combination to work.

**B. Grounds 1-2: Petitioners Fail to Show How Levin and Acker Disclose or Render Obvious Limitation [1f]**

Petitioners fail to show how Levin in view of Acker discloses or renders obvious limitation [1f]: “wherein the ultrasound transducer is positioned on a shaft of the catheter and within the expandable member.” Levin does not teach an ultrasound transducer. And, as shown in the annotation to Fig. 1 below, Acker’s ultrasound transducer is positioned outside of the shaft of the catheter on a separate rigid base—not on the shaft of the catheter. Acker discloses that “[t]he particular *transducer illustrated in FIG. 1 is a multilayer transducer incorporating a plurality of individual piezoelectric layers 22, 24 and electrodes 26, 28, 30 interspersed with the polymeric layers. The polymeric layers are superposed on a rigid base 32 such as ceramic or metallic element.*”



Acker, 3:44-49, Fig. 1 (enlarged and annotated). As demonstrated by the visible red region between the shaft of Acker's catheter (green) and the bottom surface 30 of the transducer, Acker's rigid base (red) separates the ultrasound transducer (*i.e.*, the piezoelectric layers 22, 24 and electrodes 26, 28, and 30) from the catheter. *See* Pet., 47-48. Petitioners ignore the separation of the transducer from the catheter by the rigid base shown in Figure 1 and do not explain how the "mounted" element of Acker meets or renders obvious limitation [1f]. Notably, Petitioners do not argue that it would have been obvious to change the rigid base (*e.g.*, by making it thinner or part of the shaft) in order to place the ultrasound transducer on the shaft. *Id.*